

# VMware Aria Automation: Advanced Topics

## Course Overview

This five-day course is a follow-on to the VMware Aria Automation: Install, Configure, Manage course. During this course, you will take a deeper dive into advanced topics using features of VMware Aria Automation such as deploying user systems and interfacing Aria Automation with other platforms. You will also learn how to deploy a cluster environment using VMware Aria Suite Lifecycle and interface with, and use, vSphere with Tanzu Kubernetes. This course makes heavy use of hands-on labs.

## Course Objectives

By the end of the course, you should be able to meet the following objectives:

- Describe and configure VMware Aria Automation in a clustered enterprise deployment using VMware Aria Suite Lifecycle.
- Configure VMware NSX® Advanced Load Balancer™ to support a clustered VMware Aria Automation deployment.
- Configure security certificates in VMware Aria Automation from external certificate authorities.
- Create and configure advanced VMware Aria Automation templates with complex YAML and cloudConfig.
- Use VMware Aria Automation advanced templates to deploy a two-tier database server using MySQL and phpMyAdmin.
- Use advanced VMware NSX® networking features, including NAT, routed networks, load balancers, security groups, and tags.
- Deploy vSphere with Tanzu.
- Integrate vSphere with Tanzu with VMware Aria Automation.
- Integrate VMware Aria Automation with generic Kubernetes clusters.
- Use VMware Aria Automation to deploy VMware Tanzu® Kubernetes Grid™ clusters
- Create and use VMware Aria Automation Pipelines™ to deploy software and connect to Kubernetes.
- Create and use Ansible playbooks that integrate with VMware Aria Automation.
- Integrate VMware Aria Automation with Terraform.
- Integrate VMware Aria Automation with GitLab.
- Create orchestrator workflows and ABX actions that interface with other systems and use REST calls.
- Configure and use VMware Aria Automation Orchestrator workflows and ABX actions to create day 2 actions and interface with PowerShell scripts.
- Use VMware Aria Automation Config™ to deploy minions and deploy software.

## Target Audience

- Experienced system administrators and system integrators responsible for using VMware Aria Automation in advanced configurations in enterprise deployments

## Prerequisites

This course requires completion of the following courses:

- [VMware Aria Automation: Install, Configure, Manage \[v8.10\]](#)

## Course Delivery Options

- Classroom
- Live Online
- [Private training](#)

## Product Alignment

- VMware vSphere™ 7.0.3, VMware vSphere™ 8.0.1
- VMware Aria Automation™ 8.14
- VMware Aria Suite Lifecycle™ 8.14
- VMware Aria Automation Config™ 8.14
- VMware Aria Automation Orchestrator™ 8.14
- VMware vSphere With Tanzu 8.0 update 2
- VMware NSX Advanced Load Balancer (AVI) 22.1.5

## Course Modules

### 1 Course Introduction

- Introductions and course logistics
- Course objectives

### 1 Deploying VMware Aria Automation in a Clustered Deployment

- Use VMware Aria Suite Lifecycle in a clustered deployment
- Configure external certificates
- Configure NSX Advanced Load Balancer
- Install VMware Workspace ONE® Access™ in a clustered deployment
- Install VMware Aria Automation using a clustered deployment

### 2 Creating Advanced VMware Aria Automation Templates

- Use advanced YAML and cloudConfig to deploy a functioning two-tier application with a phpMyAdmin front-end server and a MySQL database server
- Use cloudConfig and cloud-init
- Use advanced YAML techniques to create configuration files and add users to deployed virtual machines

### 3 VMware Aria Automation Advanced Networking Templates

- Use advanced NSX features in VMware Aria Automation templates
- Describe how to interface to IPAMs
- Use NSX NAT in VMware Aria Automation templates
- Use NSX routed networks
- Use NSX Advanced Load Balancer
- Use NSX security groups

### 4 Using VMware Aria Automation Orchestrator Workflows for Extensibility

- Create day 2 actions with orchestrator workflows
- Use orchestrator to add computer objects to Active Directory when VMware Aria Automation deploys templates

- Create VMware Aria Automation custom resources
- Create VMware Aria Automation resource actions
- Use VMware Aria Automation Orchestrator to perform REST calls

### 5 VMware Aria Automation Advanced ABX Actions

- Use ABX to create day 2 actions
- Create ABX action flows
- Use ABX to make REST calls

### 6 Integrating Kubernetes with VMware Aria Automation

- Describe vSphere with Tanzu
- Create a Supervisor cluster
- Create a Supervisor namespace
- Create Kubernetes zones
- Create cluster plans
- Deploy a Tanzu Kubernetes Grid cluster from VMware Aria Automation
- Manage Tanzu clusters from VMware Aria Automation
- Execute YAML code and deploy software in a managed Tanzu cluster
- Connect to an existing generic Kubernetes cluster
- Create Kubernetes namespaces from VMware Aria Automation
- Interface VMware Aria Automation to other Kubernetes systems

### 7 VMware Aria Automation Pipelines

- Create and use CI/CD pipelines
- Use the VMware Aria Automation Pipelines UI
- Add states and tasks to a pipeline
- Integrate code from a pipeline with GitLab
- Use a VMware Aria Automation pipeline to install software
- Use a VMware Aria Automation pipeline to create a Kubernetes namespace and a deployment

### 8 VMware Aria Automation and Configuration Management Tools

- Describe Ansible, Puppet, Terraform, and VMware Aria Automation Config
- Integrate Ansible with VMware Aria Automation
- Integrate Terraform with VMware Aria Automation



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- Call Terraform from VMware Aria Automation
- Use Terraform to manage VMware Aria Automation
- Deploy a VMware Aria Automation Config minion
- Install software on a VMware Aria Automation Config minion
- Create and manage files on a Linux system with VMware Aria Automation Config

## Contact

If you have questions or need help registering for this course, click [here](#).



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